

**Notice of Allowability**

Application No.

09/476,372

Examiner

Naghmeh Mehrpour

Applicant(s)

SOHN, BYOUNG-CHUL

Art Unit

2617

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to remark filed on 4/27/06.
2. ☒ The allowed claim(s) is/are 2-6 and 8.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**MELODY MEHROU**  
**PATENT EXAMINER**

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Diallo T. Crenshaw with registration number of 52,778 on 08/25/06, wherein in **claim 8**, the present application teaches a wireless resource allocation method in a wireless communication system including a plurality of wireless terminals and a single access point having a bridge function, the method teaches "wherein an error occurrence message and allocating a wireless resource for retransmission of data and wireless terminal simultaneously when the access point detects a data error wherein the wireless resource is one of a bandwidth and a time slot. Further the present application teaches that the error occurrence message is sent to the corresponding wireless terminal while the wireless resource for retransmission is allocated to the corresponding wireless terminal during a downlink period within one frame comprising the downlink period with an uplink period" in frame comprising the down-link period and up-link period, the down-link period comprises a downlink reservation period, and the downlink period comprises a broadcast period, and wherein the wireless terminal does not send a wireless resource request message for retransmission of the data.

***Allowable Subject Matter***

2. **Claims 2-6, 8**, are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding **claims 2, 8**, the present application teaches a wireless resource allocation method in a wireless communication system including a plurality of wireless terminals and a single access point having a bridge function, the method teaches "wherein an error occurrence message and allocating a wireless resource for retransmission of data and wireless terminal simultaneously when the access point detects a data error wherein the wireless resource is one of a bandwidth and a time slot. Further the present application teaches that the error occurrence message is sent to the corresponding wireless terminal while the wireless resource for retransmission is allocated to the corresponding wireless terminal during a downlink period within one frame comprising the downlink period with an uplink period" in frame comprising the down-link period and up-link period, the down-link period comprises a downlink reservation period, and the downlink period comprises a broadcast period, and wherein the wireless terminal does not send a wireless resource request message for retransmission of the data.

The closest prior art such as Chen et al. (US Publication 2004/0010744) teaches an efficient retransmission of data using symbol accumulation wherein the packet received in error is retransmitted at a lower energy-per-bit level concurrently in the same frame with the new packet. The destination device receives the data transmission and

retransmission, demodulate the signal, and separates the received data into the new and retransmitted packet. The destination device then accumulates the energy of the retransmitted packet with the energy already accumulated for the packet received in error and decodes the accumulated packet. The accumulation of the additional energy provided by the subsequent retransmissions improves the probability of a correct decoding. The throughput rate can be improved since the packet received in error is retransmitted concurrently with the transmission of the new data packet. The capacity is maximized since the retransmission of the packet received in error is at a lower energy level than that of the new packet. Chen fails to teach the present application teaches a wireless resource allocation method in a wireless communication system including a plurality of wireless terminals and a single access point having a bridge function, wherein an error occurrence message and allocating a wireless resource for retransmission of data and wireless terminal simultaneously. Chen fails to teach when the access point detects a data error the error occurrence message is sent to the corresponding wireless terminal while the wireless resource for retransmission is allocated to the corresponding wireless terminal during a downlink period within one frame comprising the downlink period with an uplink period" in frame comprising the down-link period and up-link period, the down-link period comprises a downlink reservation period, and the downlink period comprises a broadcast period, and wherein the wireless terminal does not send a wireless resource request message for retransmission of the data.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

**3. Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

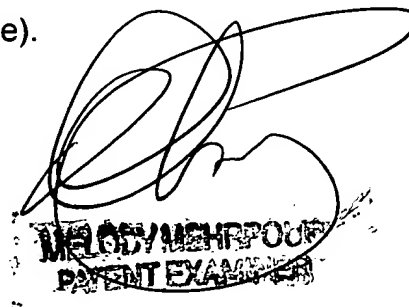
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro be reached (571) 272-7876.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

August 25, 2006



**NAGHMEH MEHRPOUR**  
**PATENT EXAMINER**